

1999 ROUTINE MONITORING SEDIMENT RESULTS - metals

ROANOKE RIVER AND TRIBUTARIES

Sampling Date	Rivermile	Stream name/location/description	% ³		ppm ²											
			TOC ¹	AI	Ag	As	Cd	Cr	Cu	Hg	Ni	Pb	Sb	Se	Tl	Zn
		Effects Range-Low	>>>>>	*	1	8.2	1.2	81	34	0.15	20.9	46.7	*	*	*	150
		Effects Range-Median	>>>>>	*	3.7	70	9.6	370	270	0.71	51.6	218	*	*	*	410
08/19/99	4ABOR012.18	Big Otter River near Rt. 682	1.578	2.0	<0.02	3.7	0.086	35	13	0.14	10	10	<0.5	<0.5	<0.3	101
09/13/99	4ABWR010.92	Blackwater River at Smith Mt Lake	0.819	1.1	<0.02	<0.5	<0.01	150	16	<0.01	9.7	7.6	<0.5	<0.5	<0.3	53
06/30/99	4ACDN002.20	Cedar Run near Rt. 603	5.833	0.67	2.5	2.3	0.38	13	14	0.19	14	50	<0.5	<0.5	<0.3	136
09/13/99	4ACUB010.96	Cub Creek near Rt. 40 gaging station (A)	1.222	2.2	<0.02	<0.5	0.087	30	16	0.14	13	21	<0.5	<0.5	<0.3	110
08/04/99	4ACUB010.96	Cub Creek near Rt. 40 gaging station (B)	2.074	1.4	0.075	<0.5	0.046	31	8.2	0.026	15.0	9.6	<0.5	<0.5	<0.3	81
08/26/99	4AFRV010.99	Falling River near Rt. 643 gaging station	0.714	0.69	<0.02	<0.5	0.048	19	<0.5	0.053	5.8	5.4	<0.5	<0.5	<0.3	57
08/18/99	4AGSE013.78	Goose Creek near Rt. 732 gaging station	1.364	1.2	<0.02	<0.5	0.046	36	5.0	0.13	10	10	<0.5	<0.5	<0.3	78
08/17/99	4ALOR007.94	Little Otter River near Rt. 784, below Bedford	1.356	1.3	0.22	1.2	0.10	23	<0.5	0.13	6.9	8.4	<0.5	<0.5	<0.3	92
07/07/99	4AMSN000.60	Mason Creek near A.R. Burton Tech.	3.278	0.96	0.34	2.2	0.62	19	15	0.21	15	65	<0.5	<0.5	<0.3	175
07/16/99	4APEE001.04	Peters Creek, Roanoke at Shenandoah Ave bridge	3.752	1.5	0.19	4.3	0.54	20	10	0.29	17	26	<0.5	<0.5	<0.3	191
09/23/99	4APGG003.29	Pigg River near Leesville Lake	1.922	1.4	<0.02	<0.5	0.060	40	<0.5	0.15	16	9.2	<0.5	<0.5	<0.3	78
09/29/99	4APGG048.81	Pigg River below Rocky Mount near Rt. 707 Ford	1.118	0.96	0.20	<0.5	0.017	41	<0.5	0.10	9.8	6.3	<0.5	<0.5	<0.3	68
06/30/99	4ARNF013.60	North Fork Roanoke River near Rt. 603	2.939	1.3	0.27	3.6	0.13	12	<0.5	0.074	20	11	<0.5	<0.5	<0.3	87
08/30/99	4AROA004.54	Roanoke River (Lake Gaston) near State Line	0.416	0.50	<0.02	<0.5	<0.01	23	<0.5	0.013	11	2.6	<0.5	<0.5	<0.3	32
09/09/99	4AROA018.04	Roanoke River (J. H. Kerr Reservoir) near Dam	1.469	2.1	<0.02	1.3	0.048	20	19	0.084	7.2	14	<0.5	<0.5	<0.3	82
09/10/99	4AROA028.44	Roanoke River(J. H. Kerr Reservoir) near Ivy Hill	0.285	0.94	<0.02	1.1	<0.01	23	4.8	0.053	3.3	5.8	<0.5	<0.5	<0.3	11
08/05/99	4AROA067.91	Roanoke River near Rt. 746 bridge	0.548	1.8	<0.02	<0.5	0.057	28	<0.5	0.077	9.3	9.7	<0.5	<0.5	<0.3	78
09/24/99	4AROA140.66	Roanoke River (Leesville Lake-Lower Lake site)	0.480	1.8	0.049	<0.5	0.14	32	42	0.10	6.0	3.4	<0.5	<0.5	<0.3	115
09/14/99	4AROA175.63	Roanoke River (SMLake) near Hales Ford bridge	0.654	2.0	0.048	<0.5	0.11	133	23	0.074	<0.1	15	<0.5	<0.5	<0.3	112
09/15/99	4AROA196.05	Roanoke River (SMLake) near Hardy	3.689	1.3	0.81	2.1	0.33	22	37	0.130	20	37	<0.5	<0.5	<0.3	158
10/18/99	4AROA199.60	Roanoke River above Niagara Dam	4.307	1.8	2.8	<0.5	0.61	29	39	0.25	<0.1	71	<0.5	<0.5	<0.3	202
07/07/99	4AROA212.99	Roanoke River, Salem near Rt. 11 bridge	6.439	1.3	1.2	<0.5	0.37	17	19	0.13	<0.1	16	<0.5	<0.5	<0.3	167
07/01/99	4AROA216.33	Roanoke River, Salem below Koppers	1.517	2.2	0.55	4.6	0.16	28	6.0	0.067	<0.1	22	<0.5	<0.5	<0.3	103
08/27/99	4AROC005.35	Roanoke Creek near Saxe	0.765	1.1	0.074	<0.5	0.027	24	2.5	0.043	10	7.8	<0.5	<0.5	<0.3	52
06/29/99	4ARSF004.63	South Fork Roanoke River near Rt. 636	5.324	1.3	0.067	<0.5	0.19	16	6.1	0.051	18	23	<0.5	<0.5	<0.3	86
08/18/99	4ATKR000.69	Tinker Creek near Rt. 24, Roanoke/Vinton line (A)	3.674	1.1	2.7	<0.5	0.78	43	39	0.34	19	244	<0.5	<0.5	<0.3	196
08/18/99	4ATKR000.69	Tinker Creek near Rt. 24, Roanoke/Vinton line (B)	2.378	0.77	0.85	2.5	0.25	18	15	0.10	13.0	74	<0.5	<0.5	<0.3	164
08/10/99	4AROA012.08	Lake Gaston near Rt. 1 bridge (Miles Creek)	1.571	1.1	0.060	<0.5	0.11	22	<0.5	0.034	9.4	8.6	<0.5	<0.5	<0.3	59
07/08/99	4AROA206.80	Roanoke River at Wasena Park near Rt. 11 bridge	2.742	0.96	0.28	4.2	0.30	20	29	0.057	19	53	<0.5	<0.5	<0.3	148
10/20/99	4AROA117.09	Roanoke River near Taber	0.224	0.76	<0.02	<0.5	0.021	27	7.8	<0.01	8.9	7.0	<0.5	<0.5	<0.3	61

¹ TOC denotes Total Organic Content

² ppm denotes parts per million (dry weight basis)

³ % denotes percent

AI	Aluminum	Cu	Copper	Sb	Antimony
Ag	Silver	Hg	Mercury	Se	Selenium
As	Arsenic	Ni	Nickel	Tl	Thallium
Cd	Cadmium	Pb	Lead	Zn	Zinc
Cr	Chromium				

Effects Range Low or Median not available